

TBD06 – (Part 06) Hormones

Name _____

1. B.6.1 **Outline** the production and function of hormones in the body. (2) *Hormones are chemical messengers. They are secreted directly into the blood by endocrine glands. Examples include ADH, aldosterone, estrogen, progesterone and testosterone, insulin, epinephrine (adrenaline) and thyroxine.*
- What is a hormone and where does it come from?

- Label the important parts of the endocrine system on the following steroid induced meathead:



- List a few hormones and their functions:

- Explain (possibly with a diagram) the difference between the two types of hormones (protein or steroid)

	Steroids	Peptides
Description		
Diagram		

2. B.6.2 **Compare** the structures of cholesterol and the sex hormones. (3) *Stress the common steroid backbone but the difference in functional groups.*

- Complete the following table

	Cholesterol	Sex Hormones
Description/Function/Origin		
Structure		

3. B.6.3 **Describe** the mode of action of oral contraceptives. (2) *Aim 8*

- a. What does FSH and LH stand for?
 - i. FSH
 - ii. LH
- b. Starting with the pituitary gland and completing with menstruation or conception, explain process of the hormones (FSH and LH) and their control of the female reproductive system:

c. There is another method that regulates the hormone progesterone, briefly explain:

d. In general, explain how oral contraceptives “trick” the female body:

4. B.6.4 **Outline** the use and abuse of steroids. (2) *Aim 8*

- a. Where is testosterone produced?
- b. What is testosterone responsible for?
- c. Explain why the Nazi attempt to dope their soldiers did not work:
- d. How can testosterone be modified to resist being broken down and flushed out?
- e. What is an anabolic steroid, how is it different than testosterone?
- f. What are the effects of anabolic steroids on the body?
 - i. On Men
 - ii. On Women
- g. What are the therapeutic benefits of anabolic steroids?